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REMARKS

APPLICANTS' RESPONSE TO THE EXAMINER'S RESPONSE TO AMENDMENTS AND ARGUMENTS

Applicants thank the Examiner for the interview of September 9, 2007. Applicants shall

provide several introductory arguments and explanations in response to the Examiner's response

and then shall discuss below the amendments to the claims and their patentability.

First, the Office Action on page 2 notes that "Applicants' amendments to the independent

claim 24 are not properly made and as to perhaps place the claim in condition for allowance."

Applicants are unsure of what the Examiner intends to mean with regards to claim 24. It appears

that the Examiner cites 37 C.F.R. § 1.11(c) which requires the Applicant to clearly point out the

patentable novelty which he/she thinks the claims present in view of the state of the art and

he/she must show the amendments avoid such references or objections. Applicants believe this

is in reference to claim 24 and accordingly, Applicants have cancelled claim 24 rendering this

issue moot.

On pages 3-5 of the Office Action, the Examiner sets forth the Office's response to our

previous arguments as well as the discussion of the personal interview. Applicants note that in

substance, the Examiner states that our argument is "moot" because "the Applicant

mischaracterizes the teachings of Narendran." Applicants respectfully and strenuously traverse

this conclusion and shall explain the error in the analysis in the Office Action. The Examiner

agrees with Applicants' teachings of Joffe et al. with regard to their focus on the use of identical

content servers at strategic locations and in the use of replicated servers. However, "the Office

found that the section of Narendran presented in the argument above is at least weak, and at most

not inclusive in the teachings of Narendran. This section is an excerpt from the Background

section of the prior art of record." The Office Action asserts that Applicants mischaracterizes the

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teachings of Narendran et al. by only citing the background section in which they are critical of

using caching or mirroring a replication approach in which caching or mirrored documents are

stored on geographically distributed sites. See Narendran et al., column 2, lines 29-53. The

thrust of the Examiner's assertion that Applicants have mischaracterized the teachings of

Narendran et al. is apparently that Applicants only cited the Background section of Narendran et

al. while ignoring the teachings of Narendran et al.'s solution to the underlying problem. The

Office Action cites the first part of the Summary of the Invention, starting at column 2, line 55,

wherein Narendran et al. identifies their invention as providing improved server-side techniques

for processing client requests received over the internet and over communication networks

without the problems associated with the above-described conventional approaches. Based on

this citation, the Office Action asserts "clearly, Narendran teaches away from Applicant's

assertion."

It is apparent to Applicants that the discussion with Supervisor David Wiley certainly

failed to be "inclusive" of all of Applicants' arguments. Notably, in our previous response,

Applicants discussed in detail not only the Background portion of Narendran et al. but also the

invention of Narendran et al. Applicants even cited column 2, lines 58 and 59 on page 6 of the

previous amendment which is the exact portion of the summary of the invention cited on page 4

of the Office Action which was used by the Examiner to "prove" that Applicants

mischaracterized the teachings of Narendran et al. by not being inclusive of the teachings of the

reference. Accordingly, Applicants can only assume that Supervisor David Wiley in his

discussion with the Examiner, simply ignored or failed to read pages 5-7 of the previous

amendment in which approximately an entire page was dedicated to the invention of Narendran

et al. which includes their low distribution algorithm that is useful for initial distribution of a set

of documents across the servers and the determination of redirection probabilities. In fact, on

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page 6 of Applicants' previous response, we state "the algorithm [Narendran et al.'s invention] can also insure that for all the documents combined <u>no more than N-1 redundant replicas</u> will exist in the system. The redirection servers redirect requests to one of the replicas with the corresponding redirection probability." (Emphasis existing in Applicants' previous response.) In other words, Applicants not only discussed extensively Narendran et al.'s server-side techniques, but highlighted their specific algorithm to the Examiner as part of Applicants' arguments. Accordingly, Applicants respectfully submit that the Office is the one that is guilty of "not being inclusive" of analyzing all of Applicants' arguments. Applicants therefore respectfully request a non-final Office Action in response inasmuch as it is clear that the core of the position of the Patent Office in the final Office Action clearly misses the mark in terms of analyzing all of Applicants' arguments.

Applicants further note that citing column 2, starting at line 52 of Narendran et al. fails to show that "clearly Narendran et al. teach away from Applicants' assertion." Applicants' assertion is fundamentally that at its core Narendran et al.'s teachings are that because the replicated server approach is limited in its scalability because of the need for keeping caches consistent, (column 2, lines 47-49), that their load distribution algorithm provides something less than a pure replica system. Their algorithm <u>reduces</u> the number of redundant copies of documents that exist in the system. In this regard, they teach that their load distribution algorithm, together with their redirection mechanism, insures that the load is properly balanced across the N document servers. In other words, it is clear that their invention is not a pure replica system in which mirrored documents are geographically distributed on each server in the network, because they clearly teach that there will be no more than N-1 redundant replicas on the system.

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Turning back to the teachings of Joffe et al., Applicants have continued to study this reference and would note that they do teach an approach that requires replicated servers. The fundamental question, then, is whether Joffe et al. leave room for an approach like Narendran et al. in which there is at least one or more document servers on the network that do <u>not</u> contain a replica of a document. Applicants respectfully submit that Joffe et al. appear to require that <u>each server on the network must</u> have replica copies of the content. For example, the network in Figure 2A, shows content servers 238, 232, 234, 236 which <u>each</u> contain replicas of the data. Column 10, lines 4-11, explain that the one or more content servers that perform the actual serving of the content each has associated with it one or more instances of a content server component capable of serving data such that outgoing packets have a source address that is selectable by the director component. The point of Joffe et al. is that where each server contains the replicated content, the routing policy disclosed by Joffe et al. requires the content serves to send data to the clients to identify a "best route" to the content. Column 3, lines 51-63 explain an example of the Joffe et al. system in which, according to the invention, may be configured to serve data objects to users according to the shortest available network path. Their system routes requests for data objects from any number of clients based on a "best server" routing policy to one of multiple content servers.

An additional reason why one of skill in the art is unlikely to blend the teachings of Narendran et al. with Joffe et al. is that, taking Figure 2A as an example, if one of the content servers in the network of Joffe et al. fails to include the desired content or the desired document because, under the load redistribution algorithm of Narendran et al., the document is on another server, then the concept of configuring the system to server data objects to users according to the "shortest available network path" may not be identifiable because the shortest available network path may be to a content server that unfortunately is the one selected to not contain the desired

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document. Thus, the "best server" routing policy may be destroyed by the load balancing

approach of Narendran et al. Accordingly, Applicants respectfully submit that their arguments

maintain their strength and when all of Applicants' arguments are considered, they have not

mischaracterized the teachings but have always in their analysis included both the teachings of

Narendran et al. in their background section as well as discussing extensively the invention of

Narendran et al. With these further arguments in mind, Applicants respectfully maintain that, by

a preponderance of the evidence, one of skill in the art would not have sufficient motivation or

suggestion to combine these teachings.

On page 5 of the outstanding Office Action, the Examiner also asserts that Applicants

have failed to present claims and drawings that delineate the contours of the invention and

clearly point out patentable novelty in view of the state of the art. Applicants respectfully submit

that the requirement of the Examiner in this regard assumes that it is appropriate to combine

Joffe et al. with Narendran et al. which if Applicants are correct is sufficient to render the claims

patentable.

Rejection of Claims 3, 4, 6-18, 20, 22 and 24-28 Under 35 U.S.C. §103(a)

The Office Action rejects claims 3, 4, 6-18, 20, 22 and 24-28 under 35 U.S.C. §103(a) as

being unpatentable over Joffe et al. (U.S. Patent No. 5,185,619) ("Joffe et al.") in view of

Narendran et al. (U.S. Patent No. 6,070,191) ("Narendran et al.). Applicants respectfully

traverse the combination of Joffe et al. with Narendran et al. as is set forth in detail above and in

previous Office Actions.

However, in order to further prosecution of this matter, Applicants have amended

independent claims 3 and 25 and have cancelled claims 6 and 24. Claim 3 now recites wherein

the content to be served by the chosen content distribution network comprises content pointed to

by a pointer embedded in a document and redirecting the client to the chosen content distribution

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network further comprises rewriting the pointer before serving the content to the client. Applicants note that support for this limitation is found in claim 6 as well as page 7 of the specification. Without incorporating limitations to the claims, Applicants note an example of this limitation wherein an HTML page may contain URLs pointing to two embedded gif pictures at a particular server. The specification explains how the URLs are modified to point to a new domain and that the URLs will be modified in the HTML page and then the embedded objects will be served by the new domain name.

The Office Action cites Joffe et al. column 13, line 1-46 as teaching the previous version of claim 6. Accordingly, Applicants note that the closest art to this limitation is cited as being in column 13 of Joffe et al. However, Applicants respectfully note that nowhere in column 13 do they teach a redirection step which involves rewriting a pointer embedded in a document that point to content before serving the content to a client. Column 13 discusses the processing of an incoming client request from a web browser or other location. This portion of the reference teaches how it is routed to a server load balancing distributed computing system which is the invention of Joffe et al. It is forwarded to the front end component which makes a request of the director component for a preferred server. The director component requests information such as the most expedient path between the servers and clients and uses that information to indicate the correct content server to be used for the client at which point the front end component directs the client to the correct content server using an HTTP redirect response. In this regard, Applicants note that the HTTP redirect response is provided from the front end component and forwarded via a NAP to the client using an IP protocol. Applicants note that this fundamentally differs from the current limitation of claim 3 which discusses, as noted above, how the content to be served by the chosen content distribution network comprises content pointed to by a pointer that is embedded in a document and which pointer is rewritten as part of the redirection process

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before serving the content to the client. Because Joffe et al. fail to teach anything regarding such

a redirection approach and rewriting pointers in documents, Applicants respectfully submit that

independent claims 3 and 25 are patentable and in condition for allowance.

Claims 4 and 7-18 each depend from claim 3 and recite further limitations therefrom.

Applicants submit that these claims are patentable and in condition for allowance. Claims 27

and 28 each depend from claim 25 and recite further limitations therefrom. Applicants submit

that these claims are patentable and in condition for allowance.

Applicants have cancelled claim 6 rendering this rejection moot. Claims 20 and 22 are

cancelled without prejudice or disclaimer and will likely be pursued in a divisional application.

Accordingly, Applicants submit that this renders the rejection moot as to these claims.

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CONCLUSION

Having addressed all rejections and objections, Applicants respectfully submit that the

subject application is in condition for allowance and a Notice to that effect is earnestly solicited.

If necessary, the Commissioner for Patents is authorized to charge or credit the **Novak, Druce &**

Quigg, LLP, Account No. 14-1437 for any deficiency or overpayment.

Respectfully submitted,

Date: December 4, 2007   By: _____

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